

REMARKS

Claims 1-28 and 33-34 are pending in the present application. Claims 1, 4, 7, 10, 13, 17, 21 and 25 are independent claims. Claims 33-34 are added by this Amendment.

35 U.S.C. 103(a) Alden in view of Kluttz

Claims 1, 4, 7, 13-24 and 29-32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Alden in view of Kluttz. Applicant respectfully traverses this art grounds of rejection.

As will be discussed below in greater detail, even if were to assume that one of ordinary skill in the art were to have an adequate motivation or rationale to combine Alden with Kluttz, that combination would not result in Applicant's claimed invention.

Discussion of Alden and Kluttz

Alden is directed to a pseudo network adapter for frame capture, encapsulation and encryption. The general functionality of Alden's pseudo network adapter is discussed with respect to Figure 15, as follows:

During operation of the elements shown in FIG. 15, the pseudo network adapter 259 registers with the network layer in the TCP/IP stack 260 that it is able to reach the IP addresses of nodes within the virtual private network 249 as shown in FIG. 14. For example, the pseudo network adapter on the client system registers that it can reach the pseudo network adapter on the server. Subsequently, a message from the tunnel client addressed to a node reachable through the virtual private network will be passed by the TCP/IP stack to the pseudo network adapter 259. The pseudo network adapter 259 then encrypts the message, and encapsulates the message into a tunnel data frame. The pseudo network adapter 259 then passes the tunnel data frame back to the TCP/IP protocol stack 260 to be sent through to the physical network adapter in the tunnel server. The tunnel server passes the received data frame to the pseudo network adapter in the server, which de-encapsulates and decrypts the message.

(Emphasis added) (See Column 14, line 58 to Column 15, line 8 of Alden)

As will be appreciated from a review of the above-excerpt of Alden, the pseudo network adapter 259 (i) receives a message or packet, (ii) encrypts the packet, (iii) encapsulates the encrypted packet within a data frame for transmission, (iv) transmits the data frame to another pseudo network adapter where the data frame is de-encapsulated and decrypted. Accordingly, the encryption of Alden is performed at the transport layer (e.g., executing TCP/IP protocols).

Kluttz, on the other hand, is directed to encrypting a stored file or document. Referring to Figures 3 and 4 of Kluttz, Kluttz teaches partitioning a document into multiple portions, and applying a different level of encryption to each portion. Portions associated with “higher” level encryption are encrypted with a higher-level specific encryption key, as well as any “lower” level encryption keys. Thus, more confidential material is protected by both the higher level encryption key as well as all lower level encryption keys. As will be appreciated by one of ordinary skill in the art, the encryption of Kluttz is directed to a file storage protocol executed at the application layer, and not at a transport layer (as in Alden).

Combination of Alden and Kluttz Could Not Result in Claimed Invention

Even assuming for the sake of argument that one of ordinary skill in the art could find some motivation to combine Alden and Kluttz, that combination would not result in the claimed invention. The methodologies associated with encryption of file storage documents, such as MS Word documents, MS Excel documents, etc., cannot simply be imported into the transport layer for encrypting TCP/IP packets. As will now be described in detail, there are fundamental differences between encryption performed at the file storage layer, or “application layer”, and encryption performed at the TCP/IP layer, or “transport layer”.

In Alden, the pseudo network adapter 259 is essentially “dumb”. In other words, the pseudo network adapter 259 does not have any special knowledge regarding any particular packet

that is encrypted/encapsulated, but rather simply encrypts/encapsulates any received packets. As is known in the art, in preparing a file document for transmission at the transport layer, the file document is broken up into a plurality of packets, such as TCP/IP packets, for transmission. The pseudo network adapter 259 does not evaluate the “content” of any packets, nor does the pseudo network adapter 259 evaluate or even consider the “document” from which individual packets were generated. Such actions simply are not performed at the transport layer. Accordingly, Kluttz’s method of partitioning a storage file document into different portions associated with different levels of encryptions makes no sense at the transport layer, nor is there any comparable transport layer operation that could be achieved based on the teachings of Alden and/or what is known in the art. In other words, how could a document be partitioned when the pseudo network adapter 259 only has knowledge of an individual packet with no knowledge of that packet’s association with any particular document? How could the pseudo network adapter 259 associate that packet with a corresponding portion of a document that is associated with a given level of security/encryption? Many more questions could be raised regarding this alleged “obvious” implementation or combination.

Instead of combining the references in the manner alleged by the Examiner, Applicant respectfully submits that a much more likely combination of Alden and Kluttz would simply be to (i) encrypt a file storage document at the application layer as indicated by Figure 2 of Kluttz and (ii) if it is determined to send the file storage document to another entity, to break up the file storage document into individual packets as is known in the art and process the individual packets through the pseudo network adapter 259 as described by Alden. In other words, because Alden and Kluttz deal with encryption at different layers, their processes would be applied separately, and not meshed together in the manner suggested by the Examiner. Further, Applicant notes that the claims would not read upon Kluttz and Alden combined in this manner.

In view of the above remarks, Applicant respectfully submits that the combination of Alden and Kluttz cannot result in Applicant's claimed invention. In particular, the combination of Alden and Kluttz cannot disclose or suggest "encrypting a first data frame based on a first unique code in a first communication device, said first unique code being derived from a first sequential code ... encrypting a second data frame based on a second unique code in the first communication device, said second unique code being derived from a second sequential code ... wherein said first portion of said first sequential code and said first portion of said second sequential code identify the same relative portions of said first and second sequential codes, and said second portion of said second sequential code represents a successive relative portion with respect to said second portion of said first sequential code" as recited in independent claim 1 and similarly recited in independent claims 4, 7, 10, 13, 17, 21 and 25.

Further, in view of the above remarks, the limitations present within newly added dependent claims 33 and 34 also distinguish over Alden and Kluttz for the reasons discussed above. Accordingly, Applicant respectfully requests an indication of allowance for claims 33 and 34.

Applicant respectfully requests that the Examiner withdraw this art grounds of rejection.

35 U.S.C. 103(a) Alden in view of Kluttz and further in view of Semper

Claims 3, 6, 9 and 12 stand rejected under 35 USC § 103(a) as being unpatentable over Alden in view of Kluttz and further in view of Semper. Applicant respectfully traverses this art grounds of rejection.

Initially, Applicant agrees with the Examiner regarding the failure of Alden and Kluttz in disclosing or anticipating certain claim limitations present within claims 3, 6, 9 and 12. The Examiner alleges, however, that Semper discloses these particular claim limitations.

Semper is directed to a system and method for providing backward compatibility of radio link protocols in a wireless network. A cursory review of Semper indicates that Semper fails to cure the suggestion and disclosure deficiencies of Alden in view of Kluttz related to independent claims 1, 4, 7 and 10. As such, claims 3, 6, 9 and 12, dependent upon independent claims 1, 4, 7 and 10, respectively, are likewise allowable over Alden in view of Kluttz and further in view of Semper at least for the reasons given above with respect to independent claims 1, 4, 7 and 10.

Applicant respectfully requests that the Examiner withdraw this art grounds of rejection.

35 U.S.C. 103(a) Marino in view of Alden and further in view of Kluttz

Claims 10 and 25-28 stand rejected under 35 USC § 103(a) as being unpatentable over Marino in view of Alden and further in view of Kluttz. Applicant respectfully traverses this art grounds of rejection.

Initially, Applicant respectfully submits that independent claims 10 and 25 include similar claim language as independent claims 1, 4, 7, 10, 13, 17 and/or 21, and as such is allowable over the combination of Alden and Kluttz for reasons discussed above.

With regard to the further addition of Marino in combination with Alden and Kluttz, Applicant notes that Marino is directed to secure communications in a wireless system. A cursory review of Marino indicates that Marino fails to cure the suggestion and disclosure deficiencies of Alden in view of Kluttz related to independent claims 10 and 25. As such, claims 26-28, dependent upon independent claim 25 are likewise allowable over Marino in view of

Alden and further in view of Kluttz at least for the reasons given above with respect to independent claim 25.

Applicant respectfully requests that the Examiner withdraw this art grounds of rejection.

35 U.S.C. 103(a) Marino in view of Alden and further in view of Kluttz and further in view of Perlman

Claim 11 stands rejected under 35 USC § 103(a) as being unpatentable over Marino in view of Alden in view of Kluttz and further in view of Perlman. Applicant respectfully traverses this art grounds of rejection.

Initially, Applicant agrees with the Examiner regarding the failure of Marino, Alden and Kluttz in disclosing or anticipating certain claim limitations present within claim 11. The Examiner alleges, however, that Perlman discloses these particular claim limitations.

Perlman is directed to a method of ephemeral decryptability. A cursory review of Perlman indicates that Perlman fails to cure the suggestion and disclosure deficiencies of Marino in view of Alden and further in view of Kluttz related to independent claim 10. As such, claim 11, dependent upon independent claim 10, is likewise allowable over Marino in view of Alden in view of Kluttz and further in view of Perlman at least for the reasons given above with respect to independent claim 10.

Applicant respectfully requests that the Examiner withdraw this art grounds of rejection.

35 U.S.C. 103(a) Marino in view of Alden and further in view of Kluttz and further in view of Semper

Claim 12 stands rejected under 35 USC § 103(a) as being unpatentable over Marino in view of Alden in view of Kluttz and further in view of Semper. Applicant respectfully traverses this art grounds of rejection.

Initially, Applicant notes that claim 12 has already been rejected in view of Alden, Kluttz and Semper, without the inclusion of Marino. As such, Applicant cannot understand why this additional rejection has been included in the Office Action, as the Examiner has already appeared to indicate that Marino is not necessary to sustain the rejection of claim 12. However, Applicant provides additional comments regarding this separate rejection below.

Applicant agrees with the Examiner regarding the failure of Marino, Alden and Kluttz in disclosing or anticipating certain claim limitations present within claim 12. The Examiner alleges, however, that Semper discloses these particular claim limitations.

As discussed above, Semper is directed to a system and method providing backward compatibility of radio link protocols in a wireless network. A cursory review of Semper indicates that Semper fails to cure the suggestion and disclosure deficiencies of Marino in view of Alden and further in view of Kluttz related to independent claim 10. As such, claim 12, dependent upon independent claim 10, is likewise allowable over Marino in view of Alden in view of Kluttz and further in view of Semper at least for the reasons given above with respect to independent claim 10.

Applicant respectfully requests that the Examiner withdraw this art grounds of rejection.

Reconsideration and issuance of the present application is respectfully requested.

Conclusion

In light of the amendments contained herein, Applicants submit that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

Dated: October 29, 2007

By: /Raphael Freiwirth/
Raphael Freiwirth
Reg. No. 52,918
(858) 651-0777

QUALCOMM Incorporated
Attn: Patent Department
5775 Morehouse Drive
San Diego, California 92121-1714
Telephone: (858) 658-5787
Facsimile: (858) 658-2502